

REMARKS

This is in full and timely response to the Office Action mailed on July 25, 2006.
Reexamination in light of the following remarks is respectfully requested.

Claims 1-7 and 15-20 are currently pending in this application, with claims 1 and 15 being independent.

No new matter has been added.

Prematureness

Applicant, seeking review of the prematureness of the final rejection within the Final Office Action, respectfully requests reconsideration of the finality of the Office action for the reasons set forth hereinbelow. See M.P.E.P. §706.07(c).

Rejections under 35 U.S.C. §102

Paragraph 3 of the Office Action indicates a rejection of claims 1-7 and 15-20 under 35 U.S.C. §102 as allegedly being anticipated by U.S. Patent Application No. 2003/013742 to Irie et al. (Irie-CIP Application).

At least for the following reasons, if the allowance of the claims is not forthcoming at the very least and a new ground of rejection made, then a new non-final Office Action is respectfully requested.

This rejection is traversed at least for the following reasons.

Claims 1-7 - Claims 2-7 are dependent upon claim 1. Claim 1 is drawn to an exposure method for projecting a desired pattern on an object to be exposed utilizing a reflective mask for an exposure light, comprising the steps of:

providing respective reflective masks each having a mask pattern consisting of only pattern forming elements of the same direction with regard to the respective longitudinal direction by dividing pattern forming elements of the mask pattern corresponding to said desired pattern relative to a projection vector of the exposure light;

sequentially carrying out projection of said mask pattern on said object to be exposed by irradiating said exposure light and its reflection light with regard to the respective reflective mask in the respective direction; and

rotating, when one reflective mask is changed to an other reflective mask, said other reflective mask and said object to be exposed so that an angle of the pattern forming elements of said other reflective mask and the projection vector becomes equal to an angle of the pattern forming elements of said one reflective mask and the projection vector.

Claims 15-20 - Claims 16-20 are dependent upon claim 15. Claim 15 is drawn to a fabrication method of a semiconductor device including a lithography process for projecting a desired pattern on an object to be exposed using a reflective mask for an exposure light, comprising the steps of:

providing respective reflective masks each having a mask pattern consisting of only pattern forming elements of the same direction with regard to the respective direction by dividing pattern forming elements of the mask pattern corresponding to said desired pattern relative to a projection vector of the exposure light;

sequentially carrying out projection of said mask pattern on said object to be exposed by irradiating said exposure light and its reflection light with regard to the respective reflective mask in the respective direction; and

rotating, when one reflective mask is changed to the other reflective mask, said other reflective mask and said object to be exposed so that an angle of the pattern forming elements of said other reflective mask and the projection vector becomes equal to an angle of the pattern forming elements of said one reflective mask and the projection vector.

Irie-CIP Application - The Irie-CIP Application arguably teaches an exposure method and exposure apparatus.

However, the above-identified application is entitled to the benefit of Japanese Patent Application No. 2002-189086 having a priority date of June 28, 2002.

The filing date for the Irie-CIP Application of November 19, 2002 is later than the priority date of Japanese Patent Application No. 2002-189086. An English language translation of Japanese Patent Application No. 2002-189086 has been previously filed on July 3, 2006. M.P.E.P. §201.15. Please take this English language translation into account in the examination of this application.

The Irie-CIP Application appears to claim the benefit of application No. 09/827,946 (Irie-Parent Application). The filing date for the Irie-Parent Application of April 9, 2001 is earlier than the priority date for the Japanese Patent Application No. 2002-189086 of June 28, 2002.

However, the 35 U.S.C. 102(e) critical reference date of a U.S. patent or U.S. application publications and certain international application publications entitled to the benefit of the filing date of a provisional application under 35 U.S.C. 119(e) is the filing date of the provisional application with certain exceptions >if the provisional application(s) properly supports the subject

matter relied upon to make the rejection in compliance with 35 U.S.C. 112, first paragraph<.

M.P.E.P. §21363.03(III).

Paragraph [0099] of the Irie-CIP Application arguably teaches:

Note that it is preferable to suppress a light amount loss by arranging between the light source 100 (specifically, a variable light-attenuator 103) and the optical integrator 106 an optical unit including at least one of a plurality of diffraction optical elements arranged in place of an optical path of the illumination optical system, a prism movable along an optical axis of the illumination optical system (a conical prism, polyhedral prism, etc.) and a zoom optical system instead of the aperture stop system 107 or in combination therewith to enable a distribution of intensity of an illumination light IL or a range of an entering angle to change on an entering surface of the optical integrator 106 in accordance with a change of illumination conditions.

Although the Irie-CIP Application has been relied upon to make the rejection of the claims, the Office Action has failed to show that this subject matter within Paragraph [0099] of the Irie-CIP Application has been properly supported in compliance with 35 U.S.C. 112, first paragraph within the Irie-Parent Application.

But even if the Irie-Parent Application properly supports this subject matter within Paragraph [0099] of the Irie-CIP Application relied upon to make the rejection in compliance with 35 U.S.C. 112, first paragraph, Paragraph [0099] of the Irie-CIP Application fails to disclose, teach, or suggest that, when one reflective mask is changed to the other reflective mask, the other reflective mask and the object are rotated so that an angle of the pattern forming elements of the other reflective mask and the projection vector becomes equal to an angle of the pattern forming elements of one reflective mask and the projection vector.

Thus, the Irie-CIP Application fails to disclose, teach, or suggest *rotating, when one reflective mask is changed to the other reflective mask, said other reflective mask and said object to*

be exposed so that an angle of the pattern forming elements of said other reflective mask and the projection vector becomes equal to an angle of the pattern forming elements of said one reflective mask and the projection vector.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

Conclusion

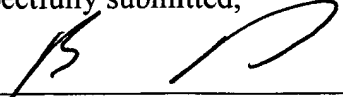
For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. Accordingly, favorable reexamination and reconsideration of the application in light of the amendments and remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

Dated: October 25, 2006

Respectfully submitted,

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